

Claims

SUB B4

1. A method for managing database schemas and/or application configuration data in at least one database system comprising at least one application master database and at least one application replica database, wherein at least one of said databases comprises a schema of the data stored in the database, **characterized** in that
- 5 - at least one schema and/or application configuration is managed externally of said at least one application master database or at least one application replica database, and
- 10 - at least one database is distributed on single or multiple servers.
2. A method according to claim 1, **characterized** in that a configuration management master is provided in a configuration management node, which is separate from each of said database nodes, a replica of at least parts of said configuration management master is stored to a server comprising the at least one database, and the schema of said at least one database is created and/or updated on
- 15 the basis of scripts of said configuration management replica.
3. A method according to claim 2, **characterized** in that the configuration of all databases of said database system are managed by said configuration management node.
- 20 4. A method according to claim 2, **characterized** in that the application configuration of all applications of said database system are managed by said configuration management node.
5. A method according to claim 2, **characterized** in that at least parts of said configuration management master and said parts of said configuration management
- 25 replica are synchronized.
6. A method according to claim 1, **characterized** in that at least parts of the application master database and said parts of the application replica database are synchronized.
7. A method according to claim 1, **characterized** in that the data of
- 30 configuration management master is maintained by a configuration management application of said configuration management node.

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8. A method according to claim 1, **characterized** in that the method is compliant with at least one of the following communication specifications: TCP/IP, CDMA, GSM, GPRS, WCDMA, UMTS, Teldesic, Iridium, Inmarsat, WLAN and imode.
- 5 9. A method according to claim 1, **characterized** in that at least one of the following operating systems is used in at least one terminal including an application replica database of the database system: Unix, MS-windows, EPOC, NT, MSCE, Linux, PalmOS and GEOS.
- 10 10. A method according to claim 1, **characterized** in that at least one of the following operating systems is used in the at least one server including an application master database of the database system: Unix, MS-windows, NT and Linux.
11. A method according to claim 1, **characterized** in that the database is a database node residing in a database server.
- 15 12. A method according to claim 1, **characterized** in that schemas and/or application configuration of at least two database systems are managed by a common configuration management node, wherein a configuration management node of an individual database system is a replica of said common configuration management node.
- SUB 20 13. A method according to claim 1, **characterized** in that the hierarchy of the application database is the same as the hierarchy of the configuration management databases, wherein the configuration management database is included as part of the application database.
- 25 14. A storage media comprising a stored, readable computer program, **characterized** in that the program comprises instructions for controlling a database system or components thereof to implement a method according to claim 1.
- 30 15. A configuration management arrangement for at least one database system comprising at least one server with application master database and at least one server with application replica database, wherein at least one database comprises a schema of the data stored in the database, **characterized** in that the arrangement comprises a configuration management node for managing a database schema of said at least one database server and/or configuration of applications accessing the database, wherein said configuration management node is separate from said at

least one application master database.

16. An arrangement according to claim 15, **characterized** in that said configuration management node comprises a configuration management master, wherein the at least one application master database server and the at least one application replica database server comprise a replica of at least parts of said configuration management master, and the arrangement comprises means for creating and/or updating the schema and/or application configuration of said at least one database on the basis of scripts of said configuration management replica.
17. An arrangement according to claim 15, **characterized** in that some or all database servers of the database system comprise a replica of said configuration management master.
18. An arrangement according to claim 15, **characterized** in that the arrangement comprises means for synchronizing at least parts of said configuration management master and said parts of said configuration management replica.
19. An arrangement according to claim 15, **characterized** in that the database system comprises means for synchronizing at least parts of the application master database and said parts of the application replica database.
20. An arrangement according to claim 15, **characterized** in that the configuration management node comprises a configuration management application for creating and/or updating the configuration management master.
21. An arrangement according to claim 15, **characterized** in that the arrangement and/or the database system is compatible with at least one of the following communication specifications: TCP/IP, CDMA, GSM, GPRS, WCDMA, UMTS, Teldesic, iridium, Inmarsat, WLAN and imode.
22. An arrangement according to claim 15, **characterized** in that the application replica database is provided in a terminal, which is a combination of a mobile station and a computer.
23. An arrangement according to claim 22, **characterized** in that the terminal has at least one of the following operating systems: Unix, MS-windows, EPOC, NT, MSCE, Linux, PalmOS and GEOS.
24. An arrangement according to claim 15, **characterized** in that the application master database server and/or the configuration management node has at least one

of the following operating systems: Unix, MS-windows, NT and Linux.

25. An arrangement according to claim 15, **characterized** in that the database is a database node residing in a database server.

26. An arrangement according to claim 15, **characterized** in that it comprises a
5 common configuration management node for managing schemas of at least two database systems, wherein a configuration management node of an individual database system is a replica of said common schema management node.

27. An arrangement according to claim 15, **characterized** in that the hierarchy of
10 the application database is the same as the hierarchy of the configuration management database, wherein the management database is included as part of the application database.

28. An arrangement according to claim 15, **characterized** in that the configuration management node is for managing a database schema of said at least one database server.

15 29. A configuration management node for at least one database system, the database system comprising at least one database in at least one database server, wherein the configuration management node comprises means for creating and/or updating configuration of schemas and/or applications accessing the database system, wherein the configuration management node is external of said at least one
20 database.

30. A configuration management node according to claim 29, **characterized** in that it comprises means for providing a configuration management master and a configuration management application for providing a database of the database system a replica of the configuration management master.

25 31. A configuration management node according to claim 29, **characterized** in that it comprises means for synchronizing said configuration management replicas of the database system with said configuration management master.

32. A configuration management node according to claim 29, **characterized** in that said configuration management master and/or configuration management
30 replica comprises scripts for creating and/or updating the schema of the at least one database and/or configuration of application accessing the database.

33. A configuration management node according to claim 29, **characterized** in

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that it is a replica of a common configuration management node for managing at least two database systems.

34. A configuration management node according to claim 29, **characterized** in that the configuration management node is for managing a database schema of said
- 5 at least one database server.

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